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HEWLETT-PACKARD COMPANY
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EXAMINER

MURPHY, DILLON J

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/981,175	Applicant(s) HAINES ET AL.	
	Examiner Dillon J. Murphy	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,9-19 and 22-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-19 and 25-32 is/are allowed.
- 6) ☒ Claim(s) 1-4,9-14,22 and 23 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- This action is responsive to the amendment filed on October 16, 2006.
- Claims 1-4, 9-19, and 22-32 are pending.

Allowable Subject Matter

Claims 15-19 and 24-32 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: Claims 15 and 17 of the current application teaches similar subject matter as the prior art of Cremon et al. (US 6802659) and Spurr et al. (US 6527356). However, claims 15 and 17 are allowed for reasons pointed out by Applicant's remarks pages 14-16.

It follows that dependent claims 16, 18 and 19 are inherently allowable for depending on an allowable base claim.

Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 24 is objected to for a similar reason as stated by Applicant on page 15 of Remarks regarding the structure of the message.

The prior art of record does not teach, disclose, or suggest the claimed limitations of (in combination with all other limitations in the claim), an imaging device comprising a sensor configured to detect a media ID from the media, a communications

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module configured to communicate with the server if the media ID does not match any predetermined parameters, and a communications module configured to configure the imaging device from parameters received from the server computer, as claimed in claim 25.

It follows that dependent claims 26-32 are inherently allowable for depending on an allowable base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 9-14, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cremon et al. (US 6802659) in view of Spurr et al. (US 6527356) and further in view of Kawabata et al. (US 5600770), hereafter Cremon, Spurr and Kawabata.

Regarding claim 1, Cremon teaches a system comprising an imaging device that is operatively coupled across a network to a server computer (Cremon, fig 1, printer #1, with network access to communicate with other equipment. Also see col 11, ln 27-35 for teaching of network server), a method comprising:

Detecting, by the imaging device, a media ID from print media (Cremon, col 5, ln 15-39, media ID is detected and read by imaging device, and col 11, ln 27-35, further

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example of media ID), the media ID substantially unique to a type of the print media (Cremon, col 10, ln 39-52, wherein specific parameters for each specific media reads on a media ID substantially unique to a type of the print media);

Responsive to detecting the media ID, downloading a set of media parameters corresponding to the Media ID from the server computer to the imaging device (Cremon, col 11, ln 27-25, wherein when the media ID corresponds to a network address the imaging device accesses configuration / operating parameters to download from remote source); and

Automatically configuring the imaging device based on the media parameters downloaded to the imaging device (Cremon, col 7, ln 3-6, configuration / operating parameters configure device. Also see col 3, ln 1-12, wherein media parameters configure imaging device).

Cremon does not disclose expressly a system comprising an imaging device coupled across a network to a server computer, nor does Cremon disclose expressly a method of determining whether any predetermined sets of media parameters contained in the imaging device correspond to the media ID, and downloading a set of media parameters and configuring said imaging device if none of the predetermined parameters correspond. Cremon, however, implies a system comprising an imaging device that is operatively coupled across a network to a server computer (col 7, ln 34-40), although Cremon does not explicitly state said system. Spurr, however, teaches a system comprising an imaging device that is operatively coupled across a network to a server computer (Spurr, fig 8, wherein printer #230 is connected to servers #260 and

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#280 via network #240). Spurr additionally teaches the paper type identifier and product code explicitly identify the media ID substantially unique to a type of the print media in col 16, ln 62- col 17, ln 6.

Cremon and Spurr are combinable because they are from a similar field of endeavor of configuring imaging devices via the network. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the explicit teachings of Spurr teaching a system connecting a printer with a server via a network with the system of Cremon teaching the method of detecting media IDs, downloading a set of parameters, and configuring the imaging device with the downloaded parameters. The motivation for doing so was given by Cremon in col 7, ln 34-40, teaching connecting the imaging device to an external computer to download parameters, col 11, ln 27-35.

The combination of Cremon and Spurr teach in a system comprising a printer connected to a server across a network, a method comprising detecting a media ID, downloading a set of media parameters, and automatically configuring the printer based upon the parameters. The combination of Cremon and Spurr does not disclose expressly a method of determining whether any predetermined sets of media parameters contained in the imaging device correspond to the media ID, and downloading a set of media parameters and configuring said imaging device if none of the predetermined parameters correspond. Kawabata, however, teaches a method in a system of a printer and server (Kawabata, fig 1, printer #105, font server #101, and communication circuit #106, which reads on a network) comprising determining whether

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any predetermined sets of media parameters contained in the imaging device correspond to the media ID (Kawabata, col 4, ln 41-43, wherein a required font is detected in a printer from print data, wherein the font reads on the media ID and the print data reads on the media. Fonts currently in memory read on a predetermined set of media), and downloading a set of media parameters and configuring said imaging device if none of the predetermined parameters correspond (Kawabata, col 4, ln 44-52, wherein if the font does not exist in the printer's font cache, which reads on if none of the predetermined parameters correspond to the media ID, the printer downloads letter data, which reads on the set of media parameters. After the data is downloaded, the printer is configured based upon the parameters).

Cremon, Spurr, and Kawabata are combinable because they are from a similar field of endeavor of configuring imaging devices over a network. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of Kawabata comprising determining whether any predetermined sets of media parameters contained in the imaging device correspond to the media ID, and downloading a set of media parameters and configuring said imaging device if none of the predetermined parameters correspond with the method of the combination of Cremon and Spurr teaching detecting a media ID, downloading a set of media parameters, and automatically configuring the printer based upon the parameters. The suggestion for doing so was given by Cremon in fig 8 and in col 8, ln 63- col 9, ln 3, wherein Cremon teaches determining if new data is detected, which implies a data correspondence determining step, and data transfer based upon the result of the

determining step. Therefore, it would have been obvious to combine Kawabata with the combination of Cremon and Spurr to obtain the invention as specified in claim 1.

Regarding claim 2, which depends from claim 1, the combination of Cremon, Spurr, and Kawabata teaches a method wherein detecting the media ID is performed responsive to determining that print media has been loaded into a print media supply tray or roll that is coupled to the imaging device (Cremon, col 6, ln 33-39, wherein code reader is utilized when rolls are fitted into the printer, i.e. detection is in response to loading print media into imaging device. Also see Spurr, col 17, ln 8-20).

Regarding claim 3, which depends from claim 1, the combination of Cremon, Spurr, and Kawabata teaches a method wherein detecting the media ID is performed responsive to receiving an imaging job request (Spurr, col 17, ln 8-20, wherein identifiers are re-read at the start of each print job).

Regarding claim 4, which depends from claim 1, the combination of Cremon, Spurr, and Kawabata teaches a method wherein downloading the media parameters further comprises: communicating, by the imaging device, a media parameter request message to the server computer, the media parameter request message comprising the media ID; and the imaging device receiving a media parameter response message comprising the media parameters from the server computer (Cremon, col 11, ln 27-35, wherein accessing network address comprises communicating a parameter request. Media parameters are received as RFID configuration data from remote network source. Additionally, see Spurr in col 17, ln 35 – col 18, ln 39, wherein imaging device communicates parameter request to server and receives a parameter update).

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Regarding claim 9, which depends from claim 1, the combination of Cremon, Spurr, and Kawabata teaches a method further comprising:

Responsive to downloading the set of media parameters, updating a look-up-table at the imaging device to map the media ID to the set of media parameters (Cremon, fig 2, printer comprises memory. Also see Cremon, col 7, ln 3-6, wherein media parameters are used to control settings of printer. Also see Cremon, col 8, ln 52-63, wherein data from RFID is stored in memory. See Kawabata, col 5, ln 58-col 6, ln 8, and fig 3, describing structure of printer. Font data is stored as temporary fonts #308, #309, #310, and #311 in the font cache #312 controlled by a font cache control table #313, which reads on mapping the plurality of media ID to a set of media parameters in a look-up-table in the imaging device. See Kawabata, col 7, ln 43-48, wherein the centralized store for data permits only letter data that is to be used by the printer to be stored at distributed locations, which reads on storing only the most recently used media ID).

Regarding claim 10, which depends from claim 1, the combination of Cremon, Spurr, and Kawabata teaches a method further comprising:

Responsive to downloading the set of media parameters, updating a look-up-table at the imaging device to map the media ID to the set of media parameters such that the look-up-table indicates a plurality of most recently used media ID to set of media parameter mappings (Cremon, fig 2, printer comprises memory. Also see Cremon, col 7, ln 3-6, wherein media parameters are used to control settings of printer. Also see Cremon, col 8, ln 52-63, wherein data from RFID is stored in memory. See

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Kawabata, col 5, ln 58-col 6, ln 8, and fig 3, describing structure of printer. Font data is stored as temporary fonts #308, #309, #310, and #311 in the font cache #312 controlled by a font cache control table #313, which reads on mapping the plurality of media ID to a set of media parameters in a look-up-table in the imaging device. See Kawabata, col 7, ln 43-48, wherein the centralized store for data permits only letter data that is to be used by the printer to be stored at distributed locations, which reads on storing only the most recently used media ID).

Claim 11 recites identical features as claim 1 except claim 11 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 1 are equally applicable to claim 11. Applicant is additionally directed to fig 2 of Cremon showing memory and CPU (not numbered). See Cremon, col 5, ln 1-6, wherein CPU inherently executes computer-executable instruction to control process.

Claim 12 recites identical features as claim 2 except claim 12 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 2 are equally applicable to claim 12.

Claim 13 recites identical features as claim 3 except claim 13 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 3 are equally applicable to claim 13.

Claim 14 recites identical features as claim 4 except claim 14 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 4 are equally applicable to claim 14.

Regarding claim 22, which depends from claim 1, the combination of Cremon, Spurr, and Kawabata teaches a method further comprising:

If at least one of the predetermined sets of media parameters correspond to the media ID, automatically configuring the image device based on the at least one predetermined set of media parameters (Kawabata, col 4, ln 44-45, wherein if the letter data is present, which reads on if the predetermined sets of media parameters correspond to the media ID, the print data is printed, which reads on configuring the image device for printing).

Regarding claim 23, which depends from claim 1, the combination of Cremon, Spurr, and Kawabata teaches a method wherein the predetermined sets of media parameters include at least one set of media parameters prestored in the imaging device in an unmodifiable form, and at least one set of media parameters previously downloaded from the server computer to the imaging device (Kawabata, fig 3, wherein predetermined sets of media parameters include fonts #308, #309, #310 and #311. Fonts are downloaded from the server computer to the imaging device, col 5, ln 58-col 6, ln 8, and fonts are stored before determining is performed to determine if the font is in memory, which reads on a prestored media parameter. Also see col 7, ln 61-63, wherein fonts are only modifiable in server computer, not the printer).

Response to Arguments

Applicant's arguments, see Remarks, pages 10-11, filed October 16, 2006, with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 103 has been fully considered

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and are persuasive in part. On page 10, Applicant argues neither Cremon nor the Spurr reference teach or suggest predetermined sets of media parameters in the imaging device, and an operation of determining whether the media ID detected from the print media corresponds to any of the predetermined media parameter sets, where if non of the predetermined media parameter sets correspond, then the media parameters are downloaded from a server computer. The examiner agrees neither Cremon nor Spurr teach this limitation, although it is clear from fig 8 of Cremon that the suggestion for doing so is given. In fig 8 of Cremon, the media ID is read, and it is determined if new data is detected. This implies a determining step of checking for correspondence between the parameters currently in the device, i.e. predetermined parameters, and the detected media ID. If the media ID is new the data is downloaded to the printer, while if the media ID is not new, the data download is bypassed. Therefore, the rejection has been withdrawn. However, upon further consideration of the suggestion found in Cremon, a new ground(s) of rejection is made in view of Kawabata et al. (US 5600770).

On page 10-11, Applicant argues the assertion by the examiner that "the downloading of parameters occurs every time a media is detected" illustrates that there is no such predetermined sets of media parameters maintained in the imaging device. Clearly, as seen in fig 8 of Cremon and explained above, the combination of Cremon and Spurr teach the predetermined parameters in the imaging device, as well as the suggestion for determining if predetermined parameters correspond to the detected media ID.

On page 11, Applicant argues neither Cremon nor the Spurr reference teach or suggest the uniqueness of the media ID to a type of the print media. The examiner respectfully disagrees, citing Cremon, col 10, ln 39-52, wherein specific parameters for each specific media reads on a media ID substantially unique to a type of the print media. Additionally, in col 16, ln 62- col 17, ln 6 of Spurr, the paper type identifier and product code explicitly identify the media ID substantially unique to a type of the print media.

On page 11, Applicant argues the Cremon reference teaches away from the modification for downloading a set of media parameters. Applicant cites col 2, ln 6-10 and col 2, ln 13-28 as teaching that connecting the printer to a computer for downloading parameters is time consuming, costly, and impractical. The examiner disagrees with this interpretation of Cremon, citing col 1, ln 66- col 2, ln 2 and col 2, ln 6-10, which states the common method for updating involves removing the product from its container to allow a qualified technician to connect the printer to the computer to download configuring parameters. In light of the "preamble" stating the common method requires a qualified service technician to conduct the download and configuring, it is clear how Cremon would claim this method time-consuming, costly, and impractical. Cremon, however, is directed to the automatic detection of a media ID from the media which in turn is used to download configuring parameters. This improved method is far different than the common method explained by Cremon in the background. The explicit disclosure of limitations of prior art teaches a need for the improved method as disclosed by Cremon and claimed in the instant application.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant's arguments with respect to claim 9 and 10 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments, see Remarks, pages 14-6, filed October 16, 2006, with respect to claims 15-19 have been fully considered and are persuasive. The rejections of these claims has been withdrawn.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Kazama et al. reference (US 7054022) is cited for teaching the downloading of sets of parameters to an imaging device. The Castelltort et al. reference (US 20040021879) is cited for teaching storing media ID and parameters in a look-up-table in memory.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-5945. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJM
January 6, 2007



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